

Obesity Is Found to Make Ovarian Cancer Deadlier



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[Obesity](#) makes ovarian [cancer](#) more deadly, a new study reports. Obese women with advanced ovarian cancer have a shorter time to recurrence and a shorter overall survival time than women of ideal weight — and not because obese people often have other medical problems. Obesity itself, the researchers suggest, is the problem.

Ovarian cancer is fairly common. “About one in 60 American women will develop ovarian cancer,” said Dr. Andrew J. Li, the senior author of the study, a faculty physician at the Cedars-Sinai Medical Center and an assistant professor of obstetrics and gynecology at the [University of California](#), Los Angeles. Each year, about 20,000 new cases are diagnosed and about 15,000 women die of the disease, according to the [American Cancer Society](#).

It is well known that obesity is associated with various malignancies, including kidney, throat, breast and colon cancers. Findings about obesity and ovarian cancer have been somewhat less clear, the researchers say, but evidence from previous studies suggests that obesity predicts a worse outcome for ovarian cancer patients as well.

The scientists wanted to know whether excess fat, apart from any other health problems it might cause, had direct effects on [tumor](#) growth. They reviewed the medical records of 216 patients at Cedars-Sinai who had surgery for epithelial ovarian cancer. The data included information on height, weight, age and any other diseases. The cause of death was presumed to be cancer related if the patient had advanced recurrent disease at the time of death.

Half the patients had ideal weight, with a body mass index from 18.5 to 24.9, and 8 percent had a B.M.I. of less than 18.5, considered underweight. Twenty-six percent were overweight, with indexes exceeding 25, and 16 percent were obese, with indexes higher than 30.

The overweight and obese differed little from normal and underweight people in age or in health status, except that they had more [hypertension](#) and [diabetes](#).

But among patients with Stage III or Stage IV disease, the most advanced stages, those with B.M.I.'s greater than 25 survived disease free for an average of 17 months, compared with 25 months for people with indexes lower than 25.

For each increase of one unit in the index, the researchers found a 4 percent increase in the risk of recurrence and a 5 percent increase in the risk of death.

This “dose response” effect strongly suggests that obesity alone is responsible for the decreased survival time, Dr. Li said.

The researchers acknowledge that [their study](#), published yesterday in the journal Cancer, has certain weaknesses.

They found that a slightly lower dose of [chemotherapy](#) relative to body surface was given to obese patients, and it is possible that this underdosing may have had a role.

In addition, fluid in the body cavity, a symptom of the disease, may have artificially increased the B.M.I. of some patients. And it is possible that other diseases like hypertension and diabetes, more prevalent among the obese, could have decreased survival among those patients.

The study was also limited by its retrospective method and small sample population.

The researchers said they believed that it was unlikely that those factors could have accounted for the decreased overall survival time of obese women. More likely, they said, is that the presence of fat tissue encourages tumor growth or increases resistance to treatment.

“There may be some factor secreted by adipose tissue that makes tumors less sensitive to chemotherapy,” Dr. Li said, referring to fat tissue. “We have some ideas, and we’re working on looking at those factors now.”

Dr. Li said obesity did not increase the risk of developing ovarian cancer, but did affect the chance of survival when a person developed it.

“Reducing obesity and maintaining an ideal body weight,” he said, “is important for many reasons. This is just one more health problem in which obesity plays a role.”